**Precalculus**

**3.4 Notes**

**One-to-One Properties:**

1. iff
2. iff

**Inverse Properties:**

**Examples using these properties:**

**Solving exponential equations (approximate to 3 decimal places):**

Ex. 1:

Ex. 2:

Ex. 3:

Ex. 4:

Ex. 5:

**Solving Logarithmic Equations (approximate to 3 decimal places):**

Ex. 6:

Ex. 7:

Ex. 8:

Ex. 9:

**Extraneous Solutions:**

Ex. 10:

**Applications:**

1. You have deposited $500 in an account that pays 6.75% interest, compounded continuously. How long will it take your money to double?
2. For selected years from 1980 to 2000, the average salary for secondary teachers (in thousands of dollars) for the year can be modeled by where represents 1980. During which year did the average salary for secondary teachers reach 2.5 times its 1980 level of $16.5 thousand?